FIG. 1

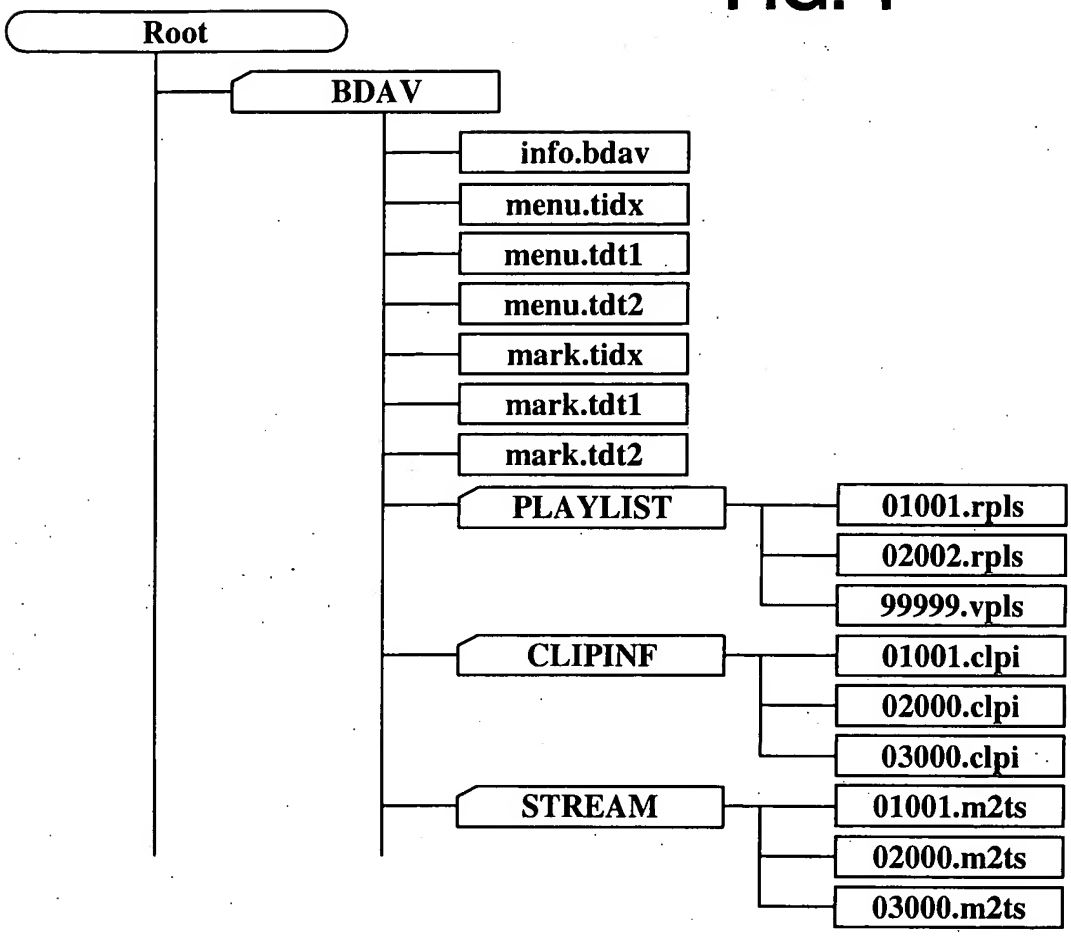

Root
BDAV
info.bdav
menu.tidx
menu.tdt1
menu.tdt2
mark.tidx
mark.tdt1
mark.tdt2
PLAYLIST
01001.rpls
02002.rpls
99999.vpls
CLIPINF
01001.clpi
02000.clpi
03000.clpi
STREAM
01001.m2ts
02000.m2ts
03000.m2ts

FIG. 2

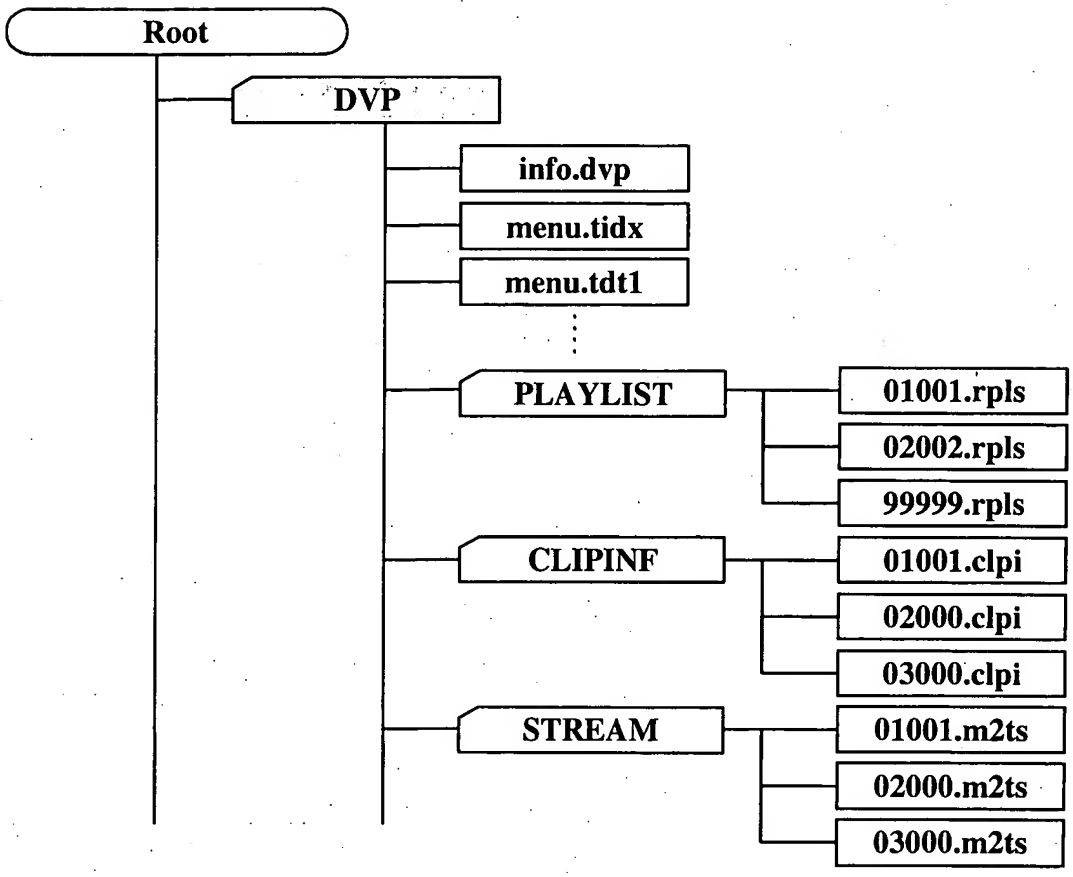

Root
DVP
info.dvp
menu.tidx
menu.tdt1
PLAYLIST
01001.rpls
02002.rpls
99999.rpls
CLIPINF
01001.clpi
02000.clpi
03000.clpi
STREAM
01001.m2ts
02000.m2ts
03000.m2ts

FIG. 3

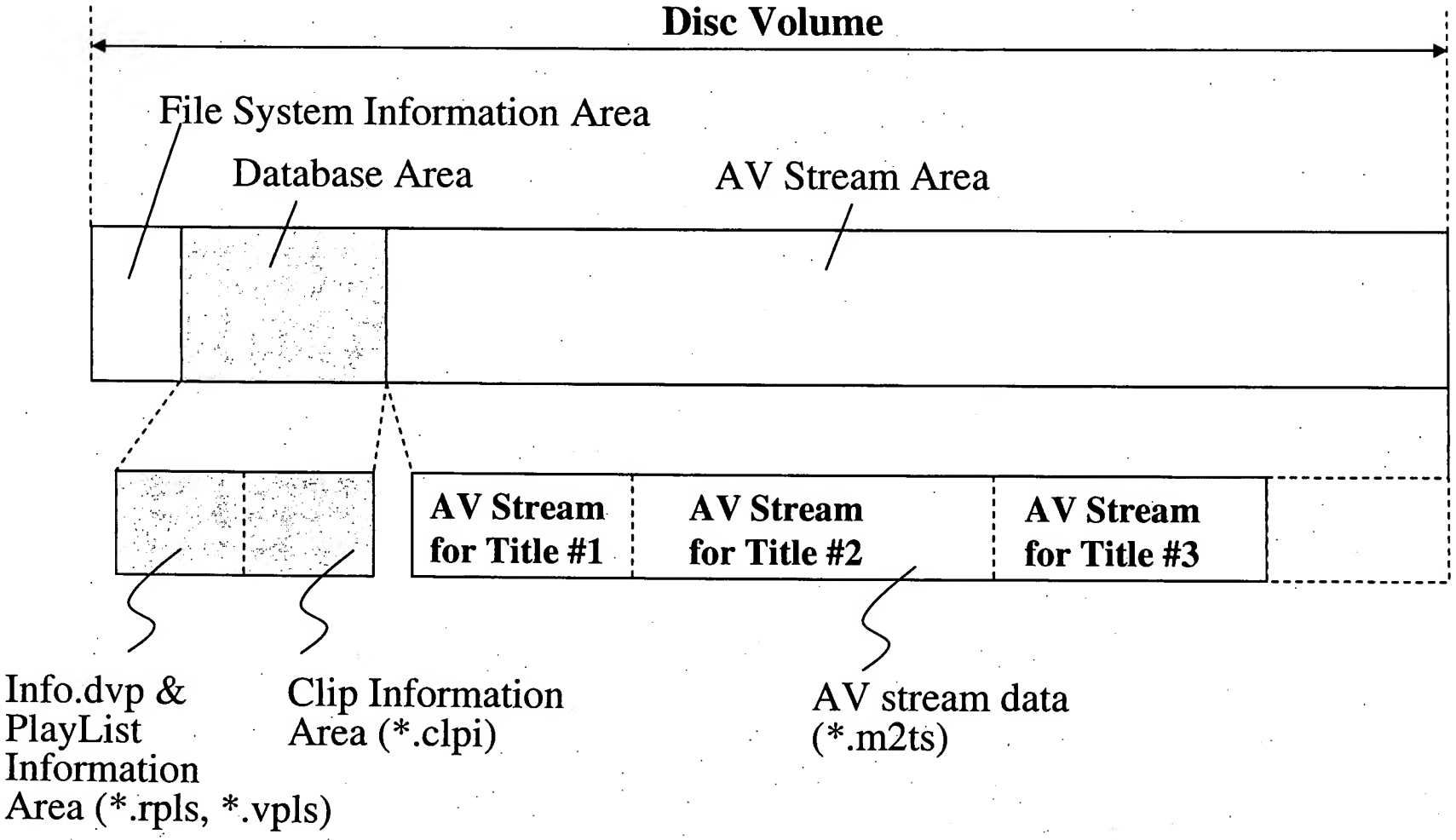

Disc Volume
File System Information Area
Database Area
AV Stream Area
AV Stream for Title #1
AV Stream for Title #2
AV Stream for Title #3
Info.dvp & PlayList Information Area (*.rpls, *.vpls)
Clip Information Area (*.clpi)
AV stream data (*.m2ts)

FIG. 4A

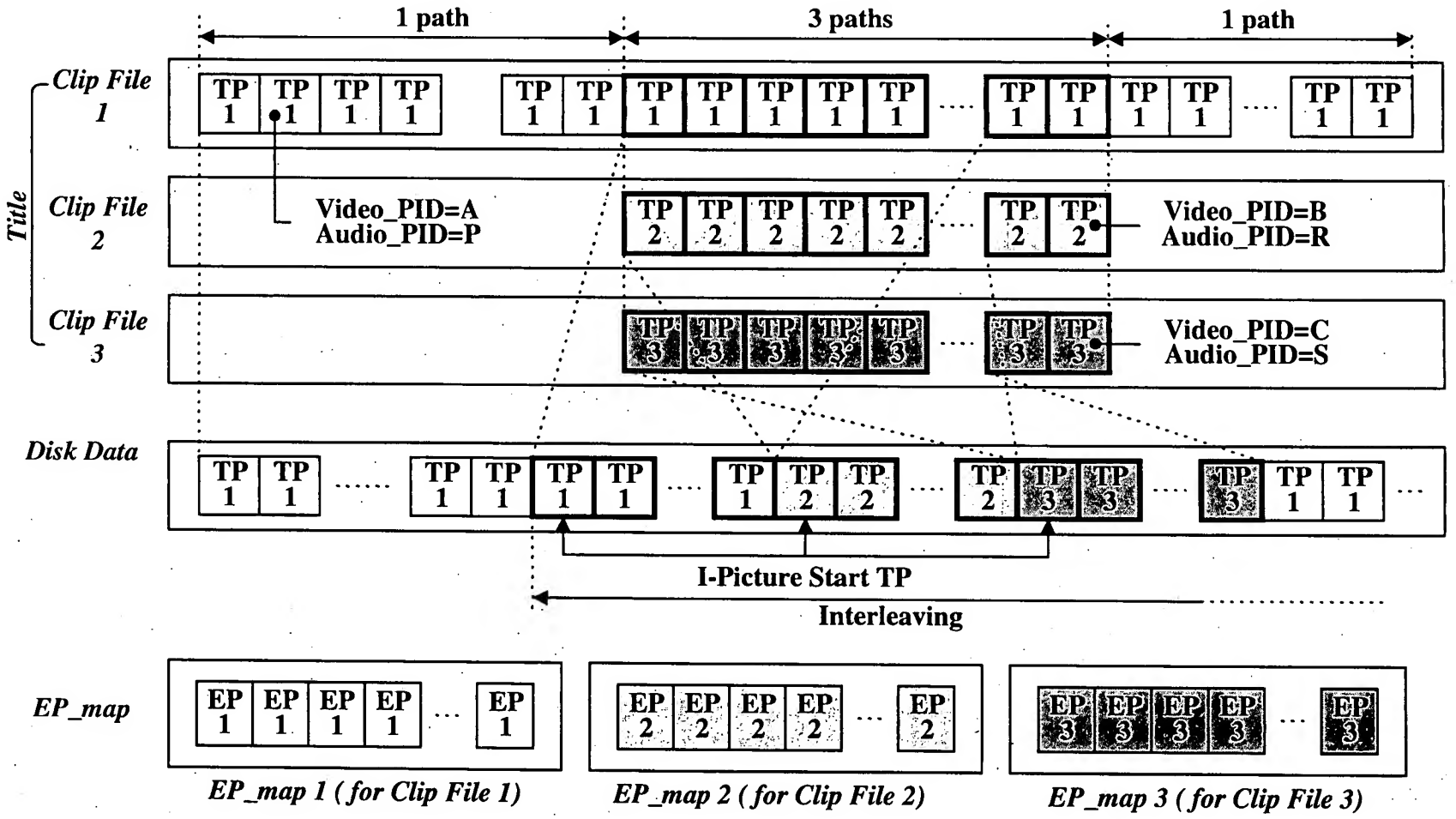
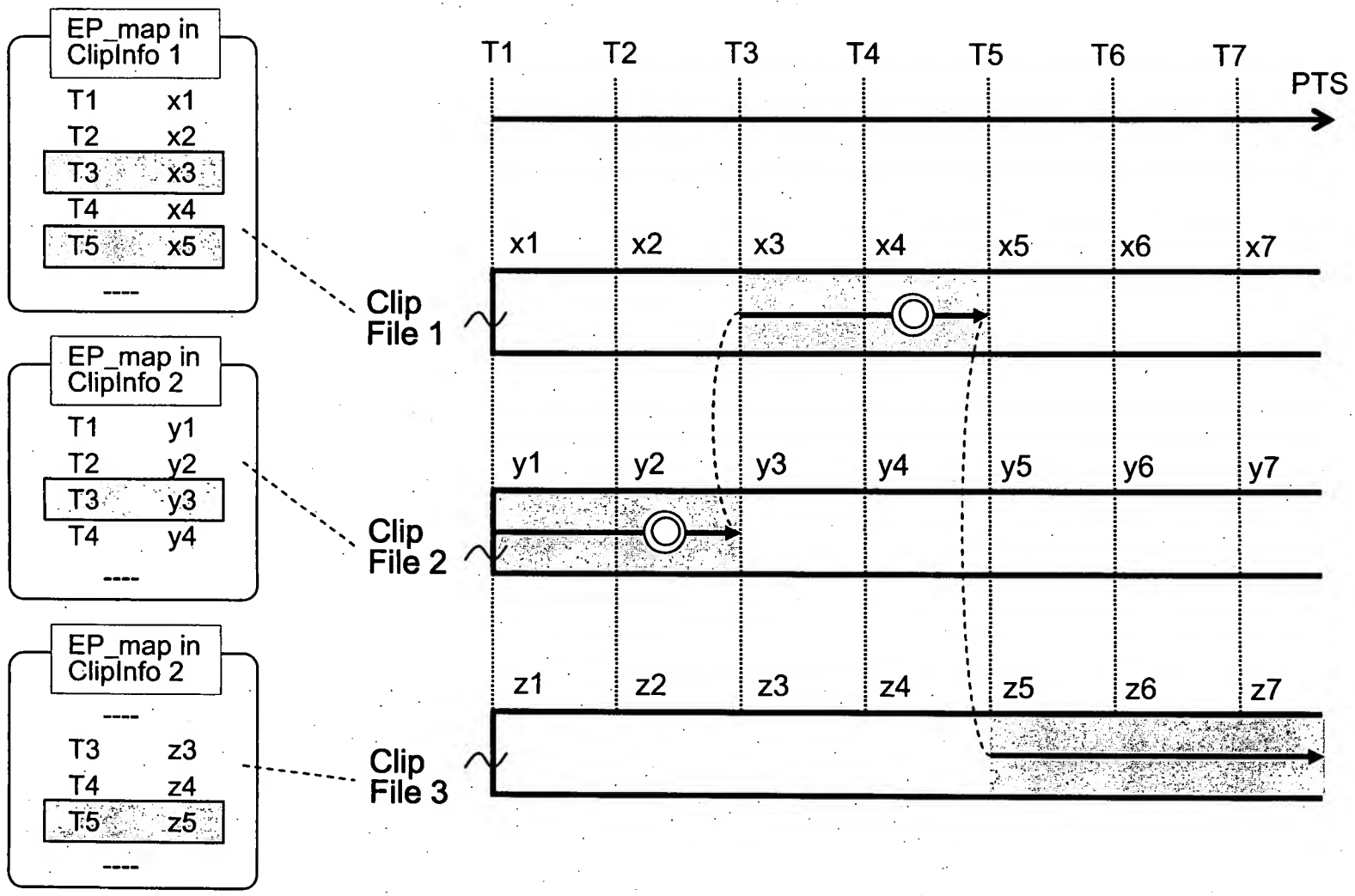

1 path
3 paths
1 path
Title
Clip File 1
Clip File 2
Clip File 3
Video_PID=A
Audio_PID=P
Video_PID=B
Audio_PID=R
Video_PID=C
Audio_PID=S
Disk Data
I-Picture Start TP
Interleaving
EP_map
EP_map 1 (for Clip File 1)
EP_map 2 (for Clip File 2)
EP_map 3 (for Clip File 3)

FIG. 4B


EP_map in ClipInfo 1
T1 x1
T2 x2
T3 x3
T4 x4
T5 x5

EP_map in ClipInfo 2
T1 y1
T2 y2
T3 y3
T4 y4

EP_map in ClipInfo 2

T3 z3
T4 z4
T5 z5

Clip File 1
Clip File 2
Clip File 3
T1 T2 T3 T4 T5 T6 T7
PTS
x1 x2 x3 x4 x5 x6 x7
y1 y2 y3 y4 y5 y6 y7
z1 z2 z3 z4 z5 z6 z7

FIG. 5

info.dvp - syntax

```
info.dvp {
        version_number
        TableOfPlayLists_start_address
        reserved_for_future_use
                :
        TableOfPlayLists(){
            length
            number_of_PlayLists
            for(I=0; i<number_of_PlayLists; i++){
                PlayList_file_name
                path_number
                ..............
            }
        }
                :
```

FIG. 6

**.rpls - syntax*

```
xxxxx.rpls {
        version_number
        ..........
        PlayList(){
            length
            ..........
            number_of_PlayItems
            for(i=0; i<number_of_Playitems; i++){
                PlayItem()
                :
```

```
PlayItem(){
    length
    .....
    path_number
    .....
```

FIG. 7

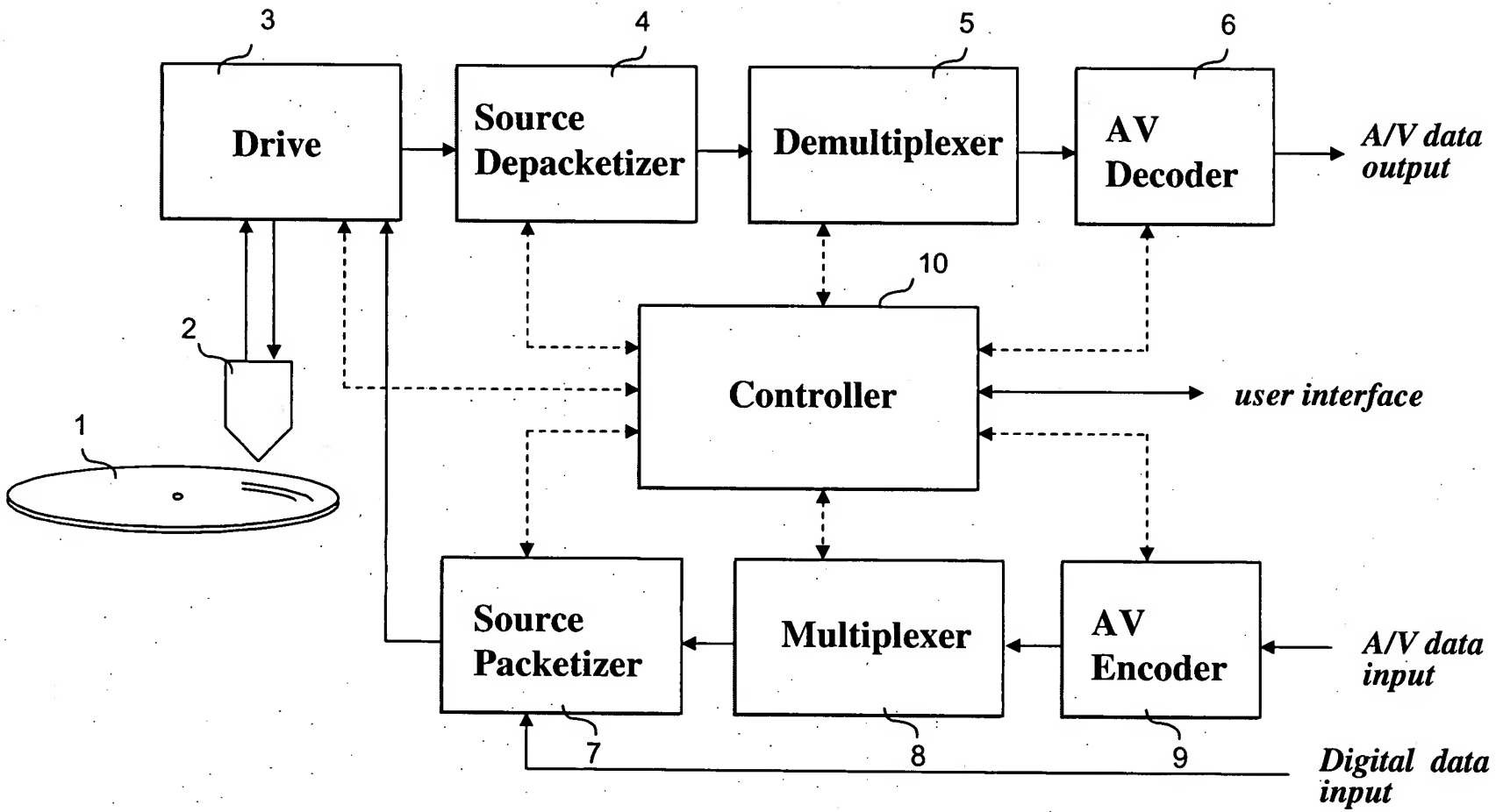

3
4
5
6
Drive
Source Depacketizer
Demultiplexer
AV Decoder
A/V data output
10
2
Controller
user interface
1
Source Packetizer
Multiplexer
AV Encoder
A/V data input
7
8
9
Digital data input

FIG. 8

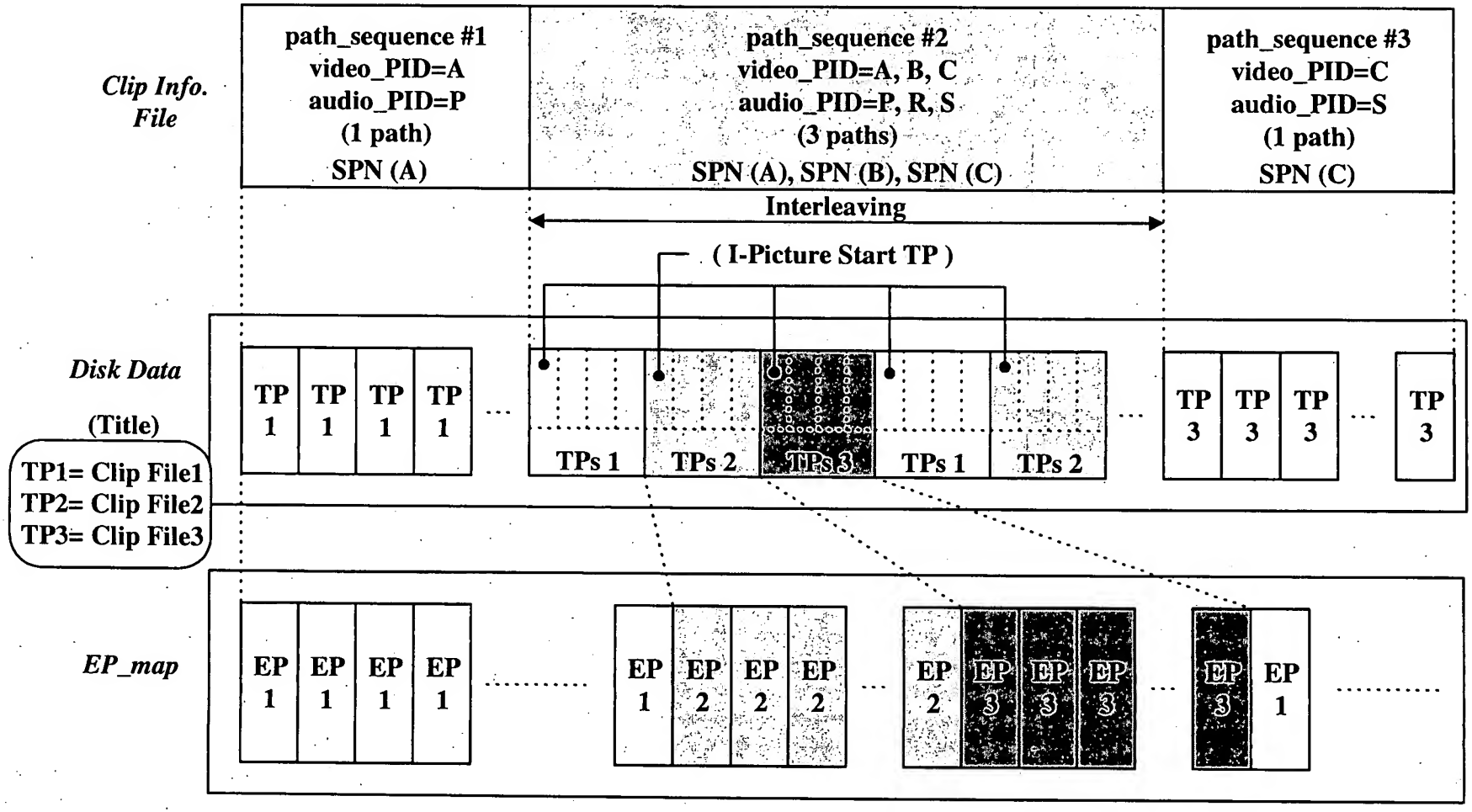

Clip Info. File
path_sequence #1
video_PID=A
audio_PID=P
(1 path)
SPN (A)
path_sequence #2
video_PID=A, B, C
audio_PID=P, R, S
(3 paths)
SPN (A), SPN (B), SPN (C)
path_sequence #3
video_PID=C
audio_PID=S
(1 path)
SPN (C)
Interleaving
(I-Picture Start TP)
Disk Data
(Title)
TP1= Clip File1
TP2= Clip File2
TP3= Clip File3
TP 1
TP 3
TPs 1
TPs 2
TPs 3
EP_map
EP 1
EP 2
EP 3

FIG. 9

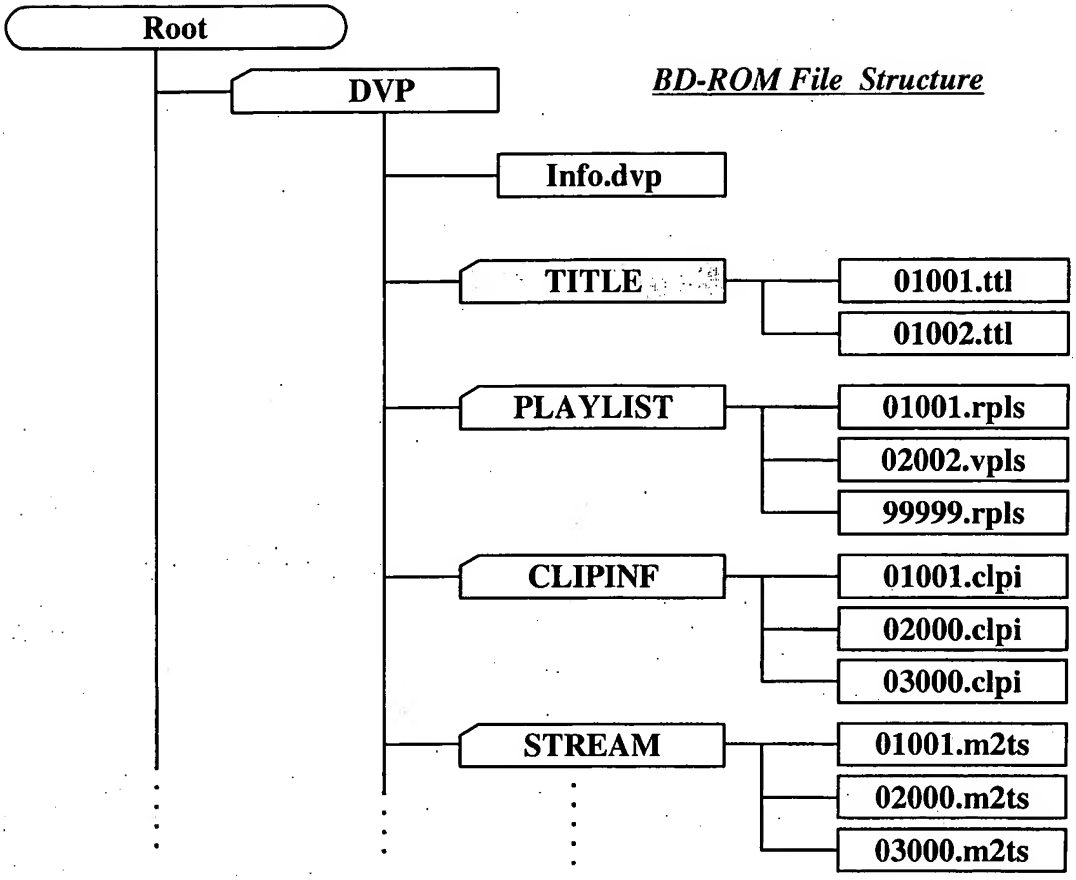

Root
DVP
BD-ROM File Structure
Info.dvp
TITLE
01001.ttl
01002.ttl
PLAYLIST
01001.rpls
02002.vpls
99999.rpls
CLIPINF
01001.clpi
02000.clpi
03000.clpi
STREAM
01001.m2ts
02000.m2ts
03000.m2ts

FIG. 10

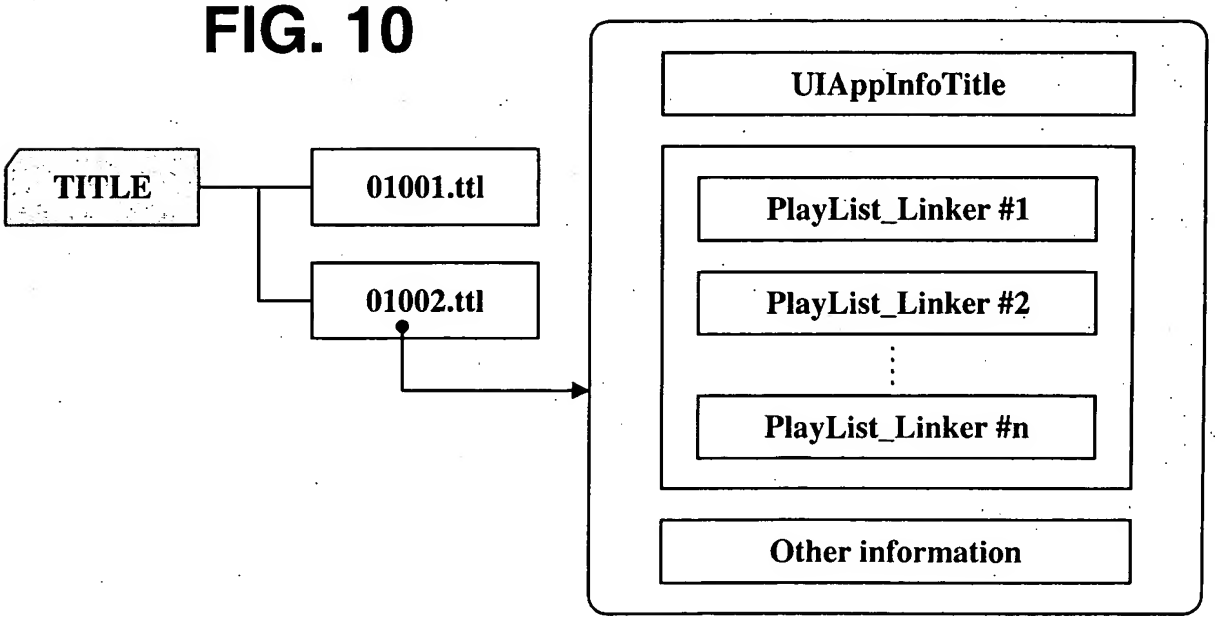

TITLE
01001.ttl
01002.ttl
UIAppInfoTitle
PlayList_Linker #1
PlayList_Linker #2
PlayList_Linker #n
Other information

FIG. 11

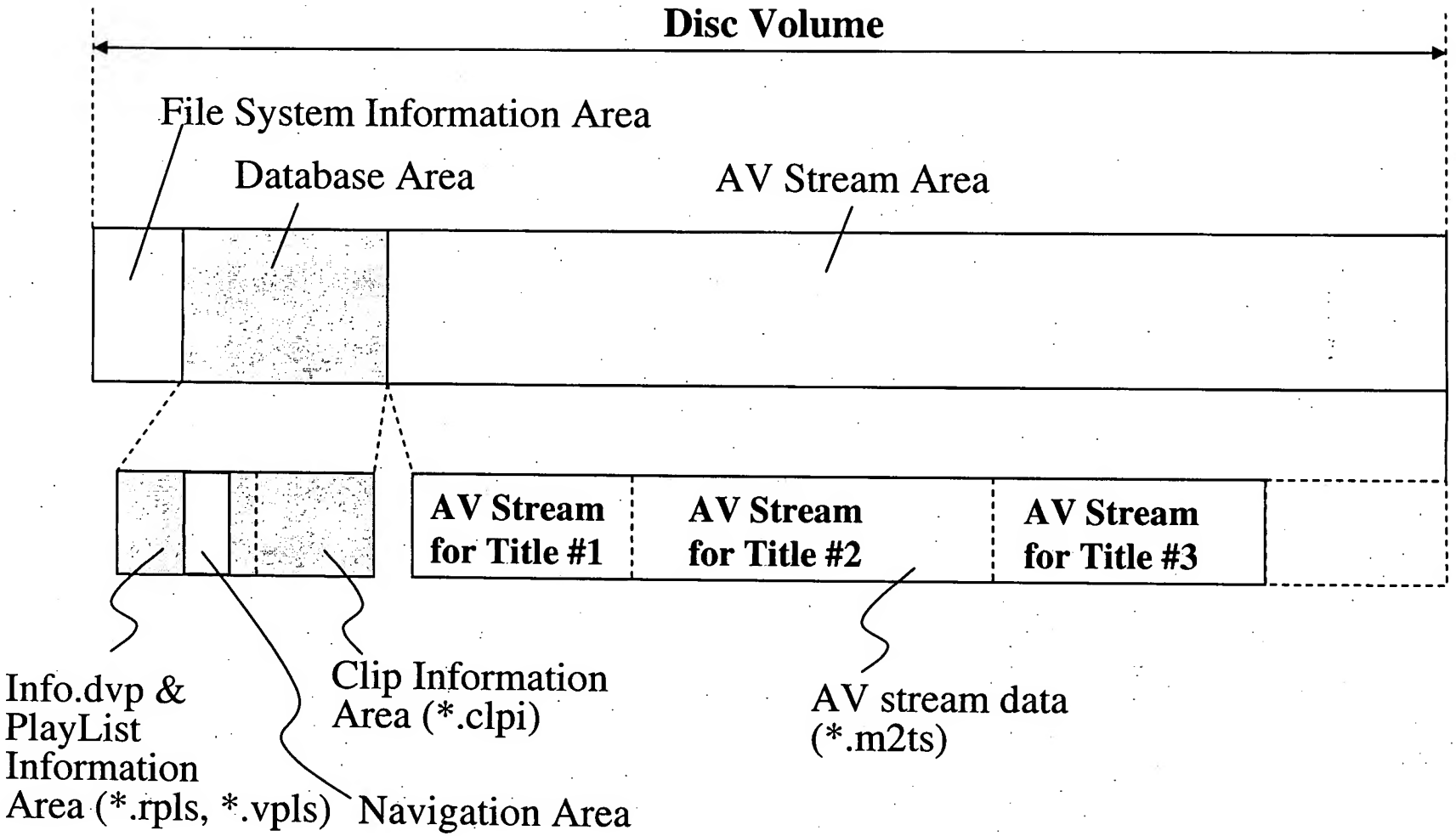

Disc Volume
File System Information Area
Database Area
AV Stream Area
AV Stream for Title #1
AV Stream for Title #2
AV Stream for Title #3
Info.dvp & PlayList Information Area (*.rpls, *.vpls)
Navigation Area
Clip Information Area (*.clpi)
AV stream data (*.m2ts)

FIG. 13

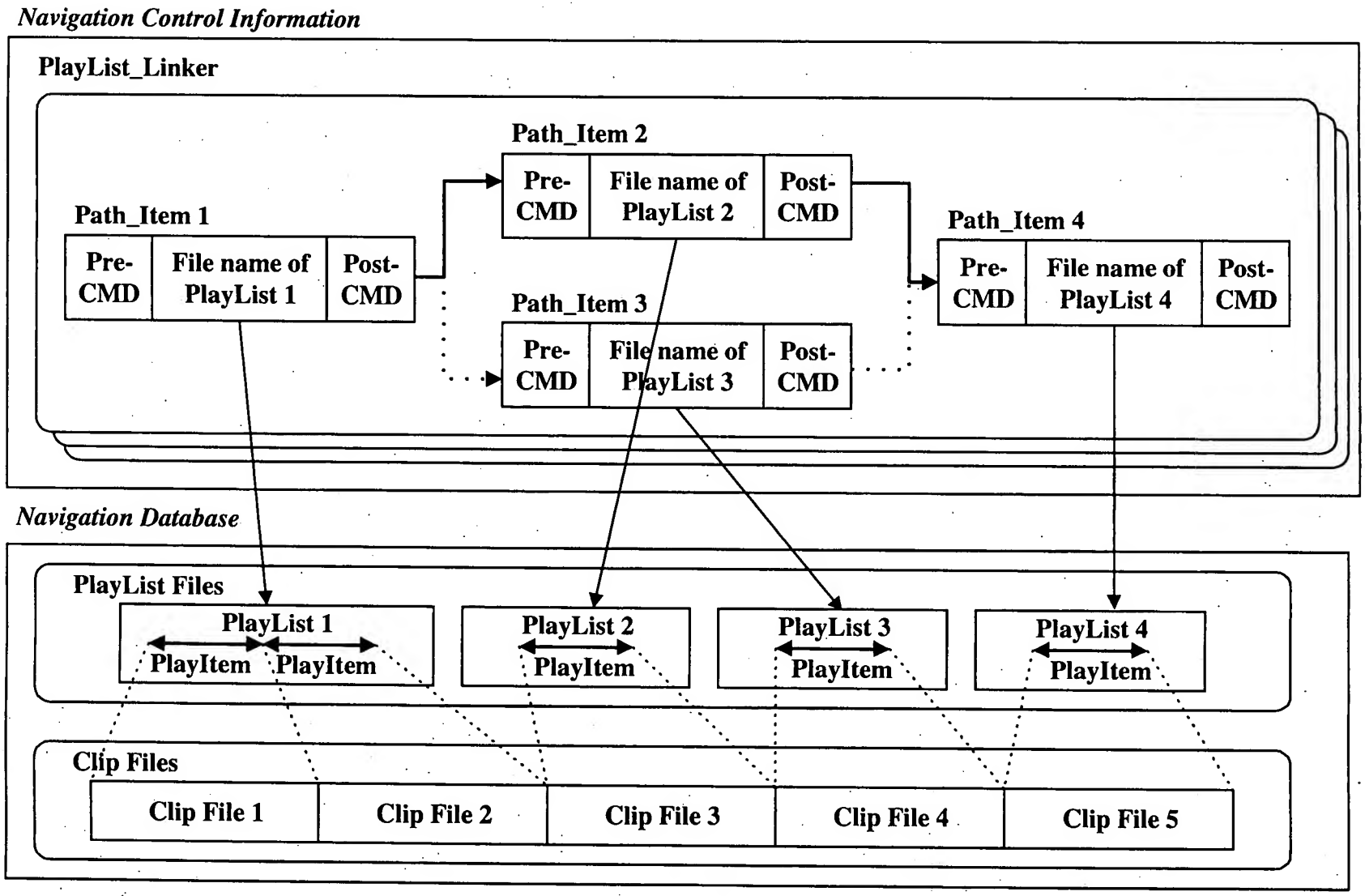

Navigation Control Information
PlayList_Linker
Path_Item 1
Pre-CMD
File name of PlayList 1
Post-CMD
Path_Item 2
Pre-CMD
File name of PlayList 2
Post-CMD
Path_Item 3
Pre-CMD
File name of PlayList 3
Post-CMD
Path_Item 4
Pre-CMD
File name of PlayList 4
Post-CMD
Navigation Database
PlayList Files
PlayList 1
PlayItem
PlayItem
PlayList 2
PlayItem
PlayList 3
PlayItem
PlayList 4
PlayItem
Clip Files
Clip File 1
Clip File 2
Clip File 3
Clip File 4
Clip File 5

FIG. 12

```
PlayList_Linker () {
        Length
        Path_type
        Number_of_PlayLists
        for (I=0; j<number_of_PlayLists; j++) {
                Pre-Command ()
                PlayList_file_name
                Post-Command ()
        }
}
```

FIG. 14

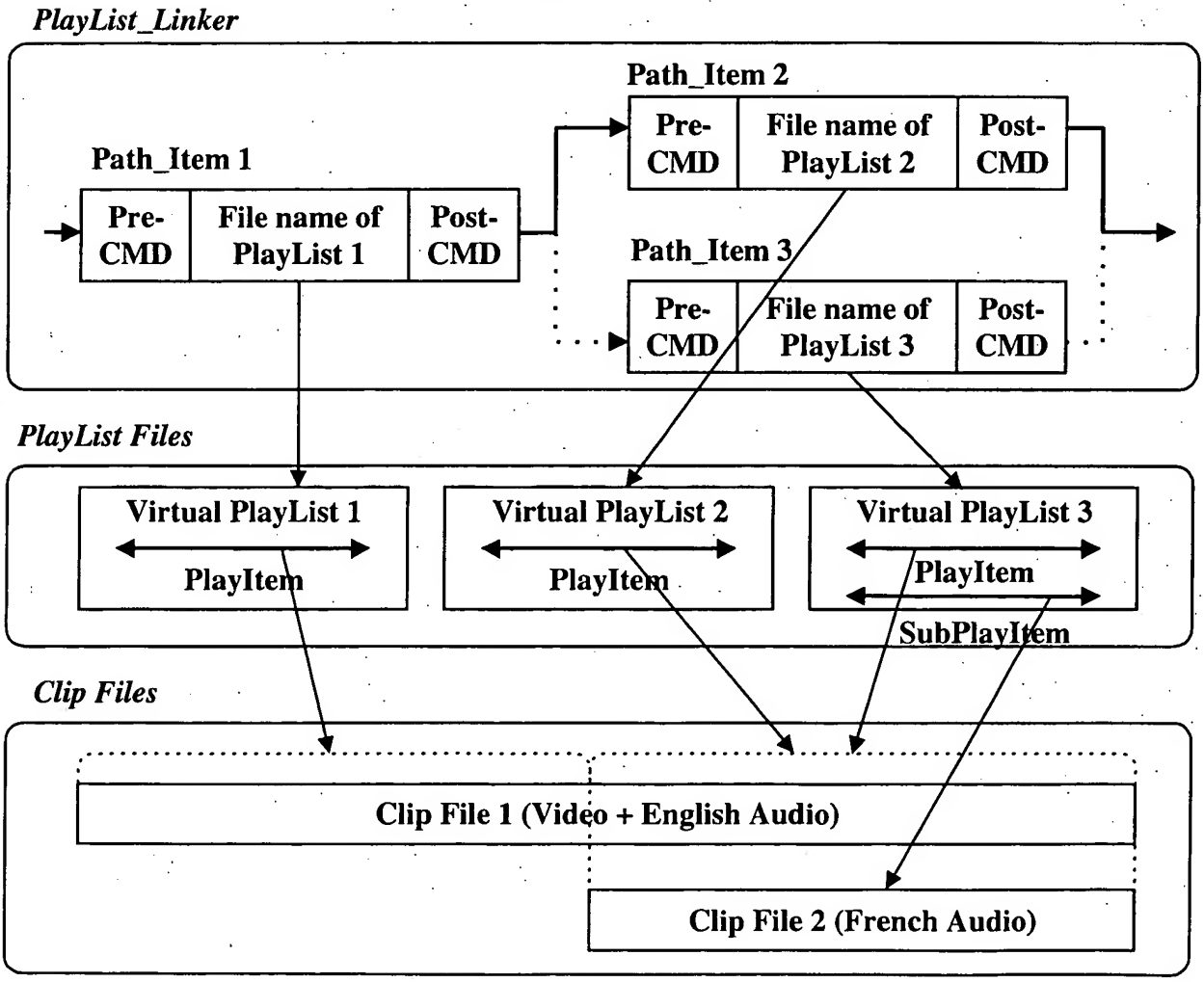


FIG. 15

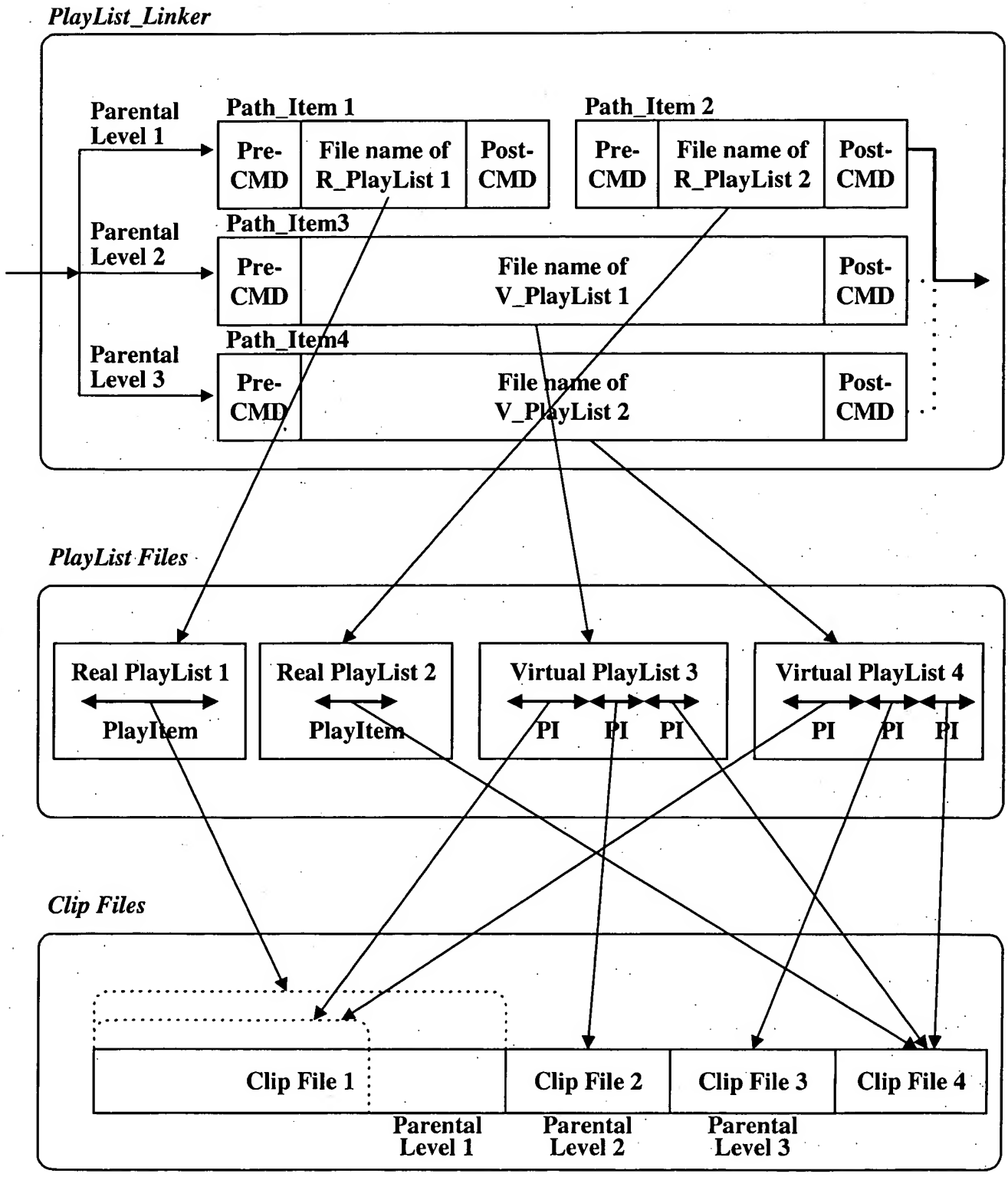

PlayList_Linker
Parental Level 1
Parental Level 2
Parental Level 3
Path_Item 1
Pre-CMD
File name of R_PlayList 1
Post-CMD
Path_Item 2
Pre-CMD
File name of R_PlayList 2
Post-CMD
Path_Item3
Pre-CMD
File name of V_PlayList 1
Post-CMD
Path_Item4
Pre-CMD
File name of V_PlayList 2
Post-CMD
PlayList Files
Real PlayList 1
PlayItem
Real PlayList 2
PlayItem
Virtual PlayList 3
PI
PI
PI
Virtual PlayList 4
PI
PI
PI
Clip Files
Clip File 1
Clip File 2
Clip File 3
Clip File 4
Parental Level 1
Parental Level 2
Parental Level 3

FIG. 16

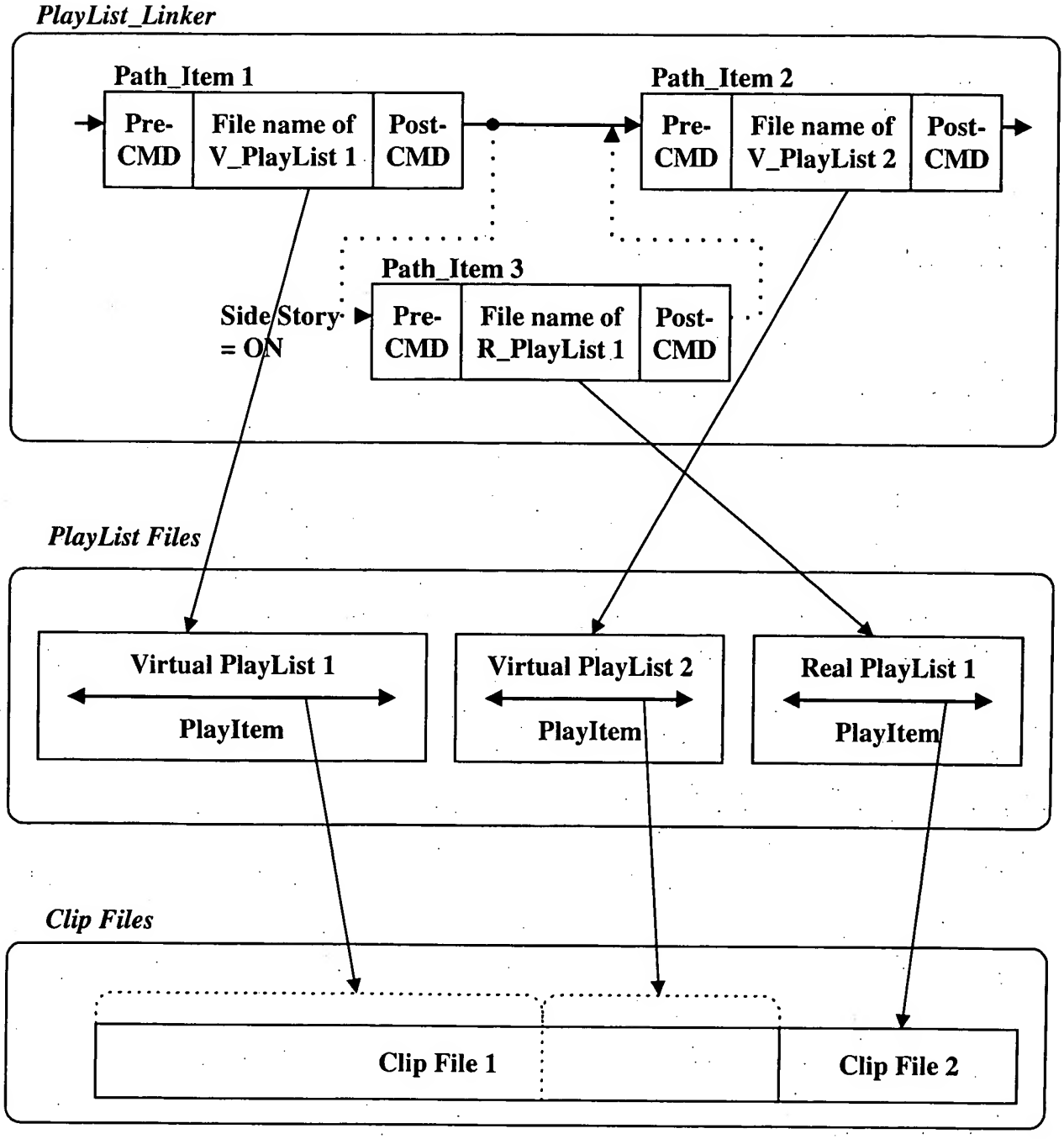
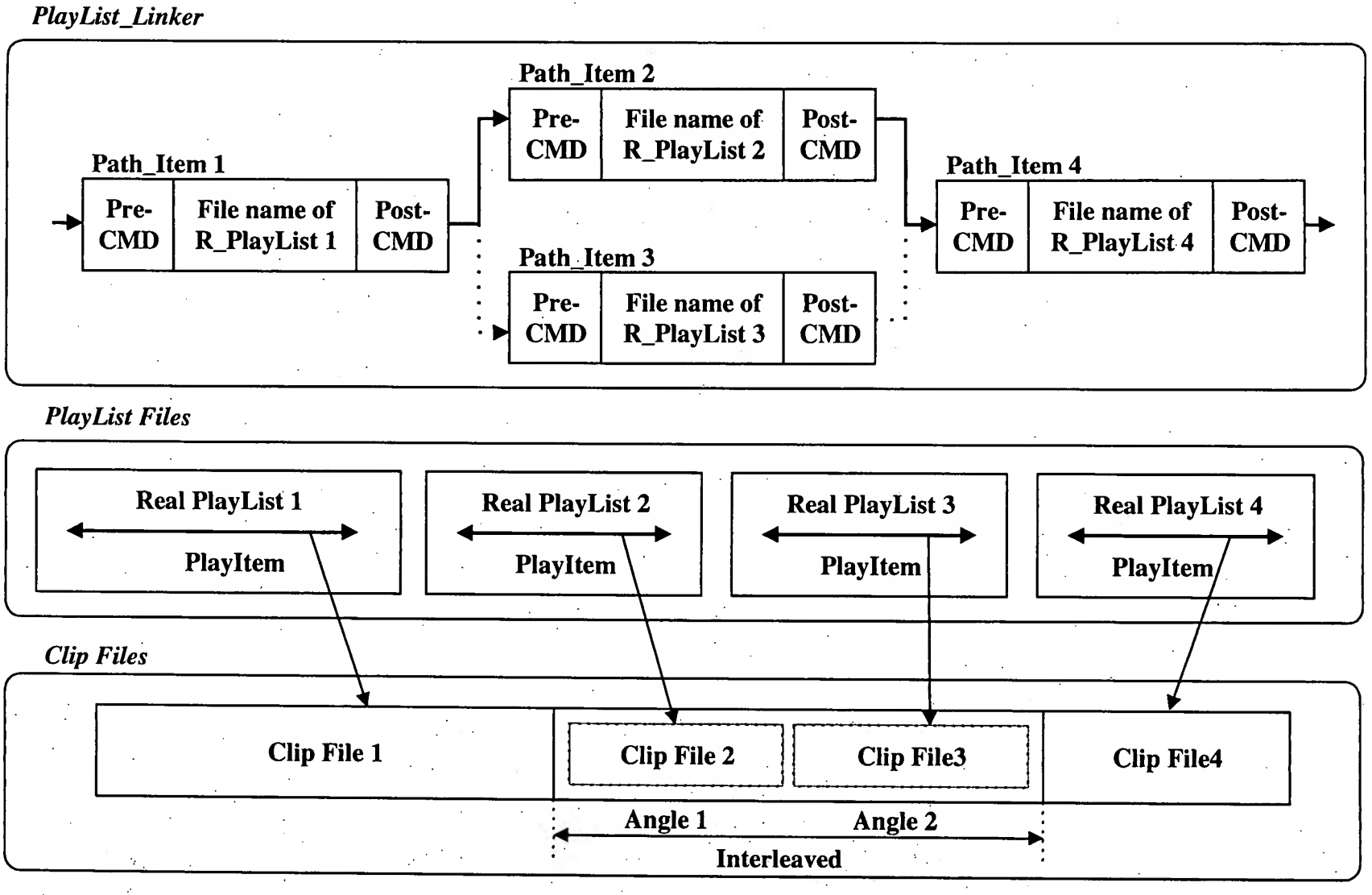

PlayList_Linker
Path_Item 1
Pre-CMD
File name of V_PlayList 1
Post-CMD
Path_Item 2
Pre-CMD
File name of V_PlayList 2
Post-CMD
Path_Item 3
Side Story = ON
Pre-CMD
File name of R_PlayList 1
Post-CMD
PlayList Files
Virtual PlayList 1
PlayItem
Virtual PlayList 2
PlayItem
Real PlayList 1
PlayItem
Clip Files
Clip File 1
Clip File 2

FIG. 17


PlayList_Linker
Path_Item 1
Pre-CMD
File name of R_PlayList 1
Post-CMD
Path_Item 2
Pre-CMD
File name of R_PlayList 2
Post-CMD
Path_Item 3
Pre-CMD
File name of R_PlayList 3
Post-CMD
Path_Item 4
Pre-CMD
File name of R_PlayList 4
Post-CMD
PlayList Files
Real PlayList 1
PlayItem
Real PlayList 2
PlayItem
Real PlayList 3
PlayItem
Real PlayList 4
PlayItem
Clip Files
Clip File 1
Clip File 2
Clip File3
Clip File4
Angle 1
Angle 2
Interleaved